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Online™

# Study of Osteoporotic Fractures (SOF)

## Study Collection Forms

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### Visit 2

### Physical Performance

Physical Performance

Form Type: Clinic Examination

#### LEGEND:

**Raw form variable** names are located next to the question they represent and do not have a border around the variable name.

**Calculated variable** names are derived from other variables and have a border around the variable name. The calculated variables names are located in close proximity to the questions from which they were derived.

Some of the questions and measurements on these forms are not being released, and therefore no variable name is provided for them.

### PERFORMANCE TESTS

Do you have any problems from recent surgery, injury or other health conditions that might prevent you from standing up from a chair or walking quickly?

yes      **V2PROB**       no

Before we do each test, I'll describe it to you.  
Please tell me if you think that you shouldn't attempt the test because of the problems you described.

**Chair Stand** (Stand up 5 times)

Armuse:  5 times w/o using arms at all       attempted, but unable to stand up once without help

**V2CHR**  5 times, uses arms part of time       attempted but unable to complete 5 stands without help

5 times, uses arms all of time       did not attempt (refused)

Time: **V2CHRTM** . \_\_\_\_ seconds to complete 5 stands

**V2STDARM**

**Toe Stand** (Dropped from exam, 7/1/89)

attains position without assistance       attains position with assistance (hand on waist)       refused       unable to attain position

\_\_\_\_ seconds (1-10) on toes

**Grip Strength**

Kilograms pulled      Right      Left

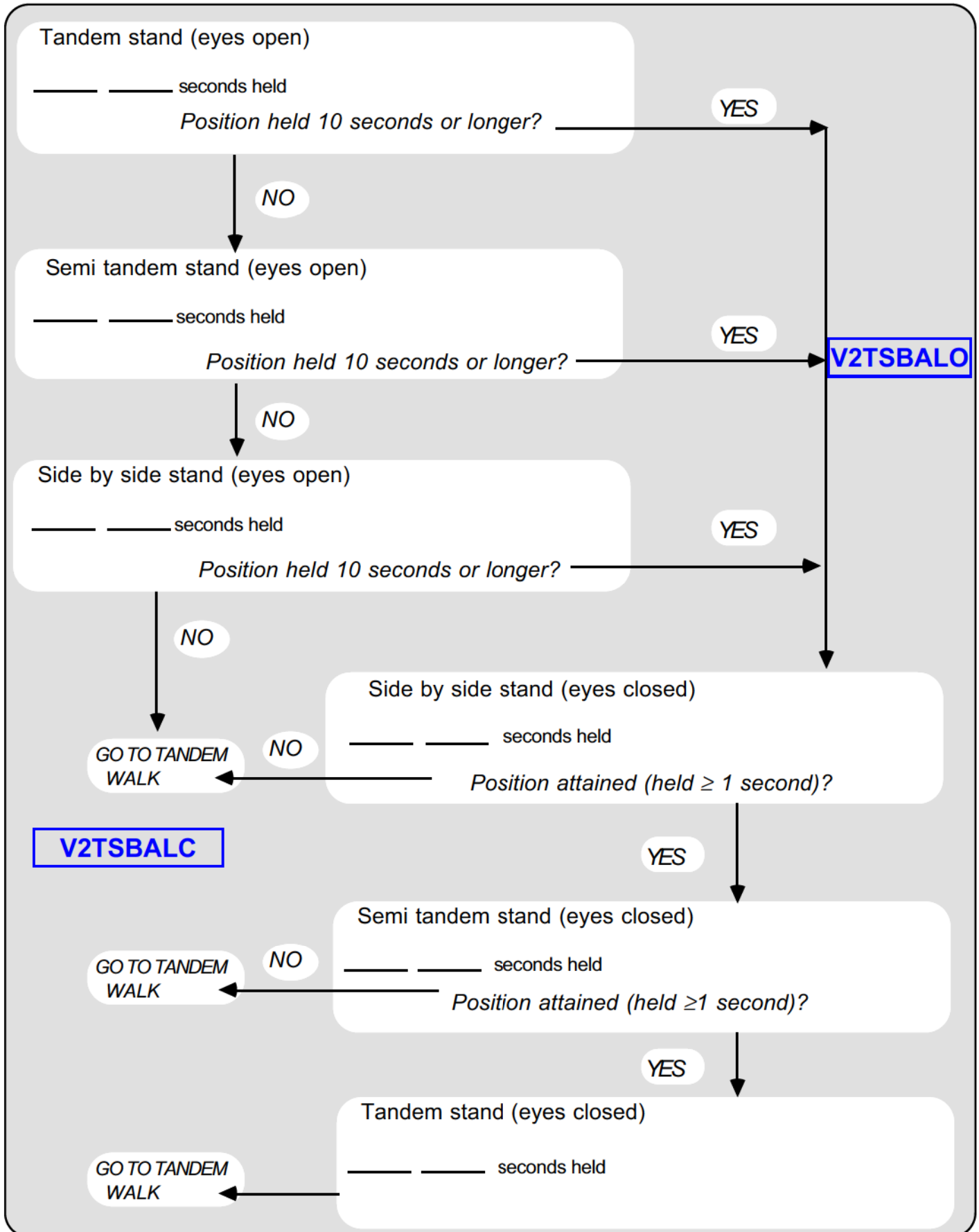
**V2GRPAVG** kg      **V2GRPMAX** kg

**Heel Walk**

Number of steps on heels (0-2)      Right      Left

**V2HLR**      **V2HLL**

# TANDEM STAND



### TANDEM WALK

Aids: **V2WAID**

- none used
- cane (discourage use)
- did not attempt/refused
- attempted but unable

ex 1

Time to complete course (to nearest second) **V2TWTM** \_\_\_\_\_

No. of touches of examiner or wall \_\_\_\_\_

Holds on most or all of the way?  yes  no

Completes course? **V2TWCC**

- Yes, all the way
- No, more than half
- No, less than half

**V2TANERR**

**V2TNERR2**

ex 2

No. of steps off line (entire foot not touching or steps with cane) \_\_\_\_\_

No. of steps not touching heel and toe \_\_\_\_\_

### GAIT

Aid used:

- no aid **V2GAID**
- straight cane
- quad cane
- walker
- crutch
- did not attempt/refused
- attempted but unable

\* Categories with the same symbol have been combined into a single category.

#### Usual Pace

Trial 1

Number of steps \_\_\_\_\_

Number of Seconds \_\_\_\_\_

**V2STPLGT**

Trial 2

Number of steps \_\_\_\_\_

Number of Seconds \_\_\_\_\_

**V2WLKSPD**

#### Rapid Pace

Number of steps \_\_\_\_\_

**V2RSTPLT**

Number of Seconds \_\_\_\_\_

**V2RWKSPD**

# MUSCLE STRENGTH

**HIP ABDUCTORS** Dropped from exam 7/1/89 Examiner ID # \_\_\_\_\_

Stroke or injury that has left one side weaker than the other ? (face page)

No → proceed with right side only **V2HWK**

Yes → test right and left sides

	<u>Force</u>	Overcome subject's resistance?	
		Yes	No
<u>RIGHT SIDE</u>	_____ kg	<input type="checkbox"/>	<input type="checkbox"/>
<u>LEFT SIDE, if indicated</u>	_____ kg	<input type="checkbox"/>	<input type="checkbox"/>

**QUADRICEPS**

Do you have an aneurism in your brain?  
 In the past four weeks, have you been hospitalized for a heart attack or myocardial infarction?

Neither     MI    If yes to either, then don't do this test. ("Don't know" is considered a "No".)

Aneurism     Both

Lever arm setting \_\_\_\_\_

Length of lever arm \_\_\_\_\_ cm (Port)

	Trial 1	Trial 2
RIGHT: peak _____	<b>V2QRAVG</b> _____ lbs	<b>V2QRMAX</b> _____ lbs
avg _____	<b>V2QRAVG</b> _____ lbs	<b>V2QRMAX</b> _____ lbs
-----		
LEFT: peak _____	<b>V2QLAVG</b> _____ lbs	<b>V2QLMAX</b> _____ lbs
avg _____	<b>V2QLAVG</b> _____ lbs	<b>V2QLMAX</b> _____ lbs

- V2QMAXA**
- V2QRLMAX**
- V2QLRAVG**
- V2QAVGA**

# BIOELECTRICAL IMPEDANCE

<u>HAVE YOU HAD:</u>		yes	no	don't know
<b>V2DIAR</b>	Diarrhea or vomiting in the past 24 hours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>V2CAFF</b>	One or more cups of a caffeinated beverage in the past 12 hours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>V2ALCH</b>	One or more drinks of alcohol in the past 12 hours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**V2POS**

<u>POSITION</u>	<b>V2ANKL</b> <u>ANKLE EDEMA</u>	<b>V2FDEF</b> <u>FOOT DEFORMITY</u>
<input type="checkbox"/> SUPINE	<input type="checkbox"/> NO	<input type="checkbox"/> NO
<input type="checkbox"/> PROPPED UP (sitting or half sitting)	<input type="checkbox"/> One Side <input type="checkbox"/> Both Sides	<input type="checkbox"/> One Side <input type="checkbox"/> Both Sides

<u>MEASUREMENTS</u>	First trial		Second trial	
	R hand/R foot	R hand/L foot	R hand/R foot	R hand/L foot
Resistance	_____	_____	_____	_____
Reactance	_____	_____	_____	_____
Impedance	_____	_____	_____	_____
Phase Angle	_____	_____	_____	_____

If R/L difference in resistance > 20, reapply electrodes and repeat for second trial.

Electrode position tested

**Right hand/Right foot**  
**Right hand/Left foot**

Amputation, cast, or other reason for alternative electrode placement.

Left hand/Left foot       Other  
Left hand/Right foot

**V2FFM**

**V2FMPEP**

IF RESISTANCE MEASUREMENTS IN FIRST TRIAL DIFFER BY > 20, REAPPLY ELECTRODES AND REPEAT MEASUREMENTS (SECOND TRIAL). ENTER THE 8 MEASUREMENTS FROM THE TRIAL WHICH HAS THE LEAST DIFFERENCE IN RESISTANCE BETWEEN RIGHT AND LEFT FOOT.

# LOWER EXTREMITY EXAM

## LIMB ABNORMALITIES

a. Genu Valgus (knock kneed)  marked  
**V2KKNE**  absent

b. Genu Varum (bowlegged)  marked ( $\geq 3$  fingers)  
**V2BOWL**  mild (2 fingers)  
 absent ( $\leq 1$  finger)

c. Other	LEFT		RIGHT	
	yes	no	yes	no
Total hip replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total knee replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paralysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amputation	ab kn <input type="checkbox"/>	bel kn <input type="checkbox"/>	ab kn <input type="checkbox"/>	bel kn <input type="checkbox"/>

**V2LHRP** **V2RHRP**  
**V2LKRP** **V2RKRP**  
**V2LCST** **V2RCST**

## HIPS (supine)

LEFT

RIGHT

### FLEXION (0 - 180 )

**V2LHFP** Pain yes  no  unable to examine  yes  no  unable to examine  **V2RHFP**  
 Range of motion **V2LHFR**    **V2RHFR**

### ABDUCTION (90 - 180 )

**V2LHAP** Pain yes  no  unable to examine  yes  no  unable to examine  **V2RHAP**  
 Range of motion **V2LHAR**    **V2RHAR**

## KNEES (supine)

LEFT

RIGHT

**V2LKTR** Tender on palpation? yes  no  unable to examine  yes  no  unable to examine  **V2RKTR**

### FLEXION (0 - 180 )

**V2LKFP** Pain yes  no  unable to examine  yes  no  unable to examine  **V2RKFP**  
 Range of motion **V2LKFR**    **V2RKFR**

# REACTION TIME

STROKE, INJURY, OR MASTECTOMY THAT HAS LEFT ONE ARM OR LEG WEAKER OR CLUMSIER THAN THE OTHER? (See face page.)

YES

**V2CLUM**

NO

Which side? (face page)

- Right → Test LEFT side
- Left → Test RIGHT side
- Both → Test a) "better" or b) dominant side
- Opposing hand/ foot → Test "normal" hand and foot

Dominant side (face page)

- Right → Test RIGHT side
- Left → Test LEFT side
- Ambidextrous → Test right side

In the past 24 hours, have you used any medication to help you sleep, or relax, or for anxiety of nerves, such as Valium, Xanax, Librium, Elavil, Dalmane, and others?

**V2M24**

- Yes     No     DK

**HAND V2RTHAND**

- Rt.     Refused
- Lt.     Unable to test hand
- Missing

**FOOT V2RTFOOT**

- Rt.     Refused
- Lt.     Unable to test foot
- Missing

Trial #	Delay	Response time	Total time	Delay	Response time	Total time
1	5 sec	<del>V2HRTAVG</del>	<del>V2HTTAVG</del>	5 sec	<del>V2FRTAVG</del>	<del>V2FTTAVG</del>
2	3 sec	<del>V2HRTSTD</del>	<del>V2HTTSTD</del>	4 sec	<del>V2FRTSTD</del>	<del>V2FTTSTD</del>
3	3 sec	<del>V2HRTECV</del>	<del>V2HTTECV</del>	2 sec	<del>V2FRTECV</del>	<del>V2FTTECV</del>
4	4 sec	<del>V2HRAV</del>	<del>V2HTAV</del>	2 sec	<del>V2FRAV</del>	<del>V2FTAV</del>
5	2 sec	<del>V2HRST</del>	<del>V2HTST</del>	1 sec	<del>V2FRST</del>	<del>V2FTST</del>
6	5 sec	<del>V2HRGV</del>	<del>V2HTGV</del>	4 sec	<del>V2FRGV</del>	<del>V2FTGV</del>
7	2 sec	_____	_____	1 sec	_____	_____
8	1 sec	_____	_____	3 sec	_____	_____
9	1 sec	_____	_____	5 sec	_____	_____
10	4 sec	_____	_____	3 sec	_____	_____



**ANKLES (supine)**

LEFT

RIGHT

Tender on palpation?    yes    no    unable to examine

yes    no    unable to examine

V2LATR

V2RATR

DORSIFLEXION

Pain    yes    no    unable to examine

yes    no    unable to examine

V2LADP

V2RADP

PLANTAR FLEXION

**V2LAPP** Pain    yes    no    unable to examine

yes    no    unable to examine

V2RAPP

**TOES (supine)**

LEFT

RIGHT

Great toe: Tender on palpation?    yes    no    unable to examine

yes    no    unable to examine

V2LGTT

V2RGTT

Toes 2-5: Tender on palpation?    yes    no    unable to examine

yes    no    unable to examine

V2LT2T

V2RT2T

Great toe: flexion/extension pain    yes    no    unable to examine

yes    no    unable to examine

V2LGTF

V2RGTF

Toes 2-5: flexion/extension pain    yes    no    unable to examine

yes    no    unable to examine

V2LT2F

V2RT2F

**HIPS (sitting)**

LEFT

RIGHT

EXTERNAL ROTATION (0 - 90)

Pain    **V2LHEP**    yes    no    unable to examine

yes    no    unable to examine

Range of motion    **V2LHER**    \_\_\_\_\_ °

**V2RHER**    \_\_\_\_\_ °

INTERNAL ROTATION (90 - 180)

Pain    **V2LIRP**    yes    no    unable to examine

yes    no    unable to examine

Range of motion    **V2LIRR**    \_\_\_\_\_ °

**V2RIRR**    \_\_\_\_\_ °

# REFLEXES

## PALMOMENTAL REFLEX

Dropped 7/1/89

Dominant Hand (face page)

- Right → Test right side
- Left → Test left side

**V2PDOM**

### FIRST TEST (two trials) **V2REF1**

- Positive (twitch on both trials)
- Negative (no twitch on 1 or both)
- Not sure (at least one trial unsure)  
repeat test
- Refused
- Unable to test

### REPEAT TEST (two trials) **V2REF2**

- Positive (twitch on both trials)
- Negative (no twitch on 1 or both)
- Not sure (at least one trial unsure)
- Refused
- Unable to test

**V2REF**

## GLABELLAR REFLEX

Dropped 7/1/89

Tap forehead six times (remove glasses)

- positive (6 consecutive blinks: one per tap)
- negative (fewer than 6 consecutive blinks)
- refused
- unable to test

**V2GLB1**

If positive first time, repeat test

- positive (6 consecutive blinks: one per tap)
- negative (fewer than 6 consecutive blinks)
- refused
- unable to test

**V2GLB2**

**V2GLB**

# ESTHESIOMETER

Test each toe twice. Record the thinnest (lowest) filament that the participant identified correctly both times. If the participant makes an error, go on the next higher filament. If big toe is missing, test adjacent toe.

### RIGHT BIG TOE

#### **V2RFIL**

Filament \_\_\_\_\_  none felt  refused  unable to test

Extremity cold to touch?  Yes  No

#### **V2RCLD**

Tested on callus? (record filament)  Yes  No

#### **V2RCAL**

### LEFT BIG TOE

#### **V2LFIL**

Filament \_\_\_\_\_  none felt  refused  unable to test

Extremity cold to touch?  Yes  No

#### **V2LCLD**

Tested on callus? (record filament)  Yes  No

#### **V2LCAL**

#### FILAMENT CODES

1 = 3.22	4 = 4.56
2 = 3.61	5 = 5.07
3 = 4.17	6 = 6.10

#### RANDOM TOUCH SEQUENCE. TOUCH ON

C B C A C A A A B C B A B B B A (repeat from start)

# VIBRATION THRESHOLDS

## Great Toe

Vibratron No. \_\_\_\_\_

Test right toe. If toe missing or can't test right, test left.

valid test   
  invalid test   
  refused   
  unable to test (e.g. toes missing)

**V2TVIB**

Vibration intensity      Circle if correct. Cross out if incorrect. Stop at 5 errors.

14.6	A	A	B	A	A	B	A	B	A	A	A	A	B	A	B	B
13.1	B	A	A	B	A	A	B	B	B	A	A	B	B	A	B	A
11.8	B	B	A	B	A	B	A	A	B	A	B	B	B	B	B	A
10.6	A	A	B	B	B	B	A	A	B	A	B	A	B	A	A	B
9.5	A	B	A	A	B	A	B	A	B	B	A	B	A	B	B	B
8.6	A	B	A	A	B	A	B	A	B	B	B	A	B	A	A	A
7.7	B	B	A	B	B	A	A	B	A	B	A	B	B	B	B	B
6.9	B	B	A	B	A	A	A	B	B	A	B	B	B	B	A	B
6.2	A	B	B	A	A	B	B	B	A	A	A	B	B	A	B	A
5.6	B	B	A	A	B	A	A	B	B	A	B	B	A	B	B	B
5.0	A	A	A	B	B	B	B	A	A	B	B	B	A	B	A	B
4.5	A	A	B	A	A	B	B	A	B	B	B	B	A	A	A	A
4.1	B	B	A	A	B	B	A	A	A	A	B	A	B	A	A	B
3.7	A	B	A	A	A	B	B	B	A	A	A	B	B	A	B	B
3.3	B	B	B	B	B	A	A	A	B	B	B	B	A	A	A	B
3.0	B	B	A	B	B	B	B	A	A	B	A	A	A	A	B	A
2.7	A	A	A	B	A	A	A	B	A	A	A	B	B	B	A	A
2.4	A	A	A	A	A	B	B	A	B	B	B	B	A	A	A	A
2.2	A	A	B	A	A	B	B	A	A	B	B	B	B	A	A	A
2.0	A	A	A	B	B	A	A	B	B	B	B	A	A	B	A	A
1.8	B	B	A	B	A	B	A	B	A	A	B	B	B	B	B	A
1.6	A	A	B	A	B	B	A	A	B	A	B	A	B	A	A	B
1.4	B	A	A	B	A	A	B	B	A	B	A	B	B	A	B	A
1.2	B	B	A	B	A	B	A	B	A	A	B	B	A	B	B	A
1.1	A	A	B	B	B	B	A	A	B	A	B	A	B	A	A	B
0.9	A	B	A	A	B	A	B	A	B	B	A	B	A	B	B	B
0.8	A	B	A	A	B	A	B	A	B	B	B	A	B	A	A	A

5 errors

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

5 lowest correct

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

**V2THMAX**

**V2THMIN**

**V2VAVG**

**V2VIBTH**

**V2VCLD** Extremity cold to touch?     yes     no

**V2FLLW** Followed directions?     yes     no